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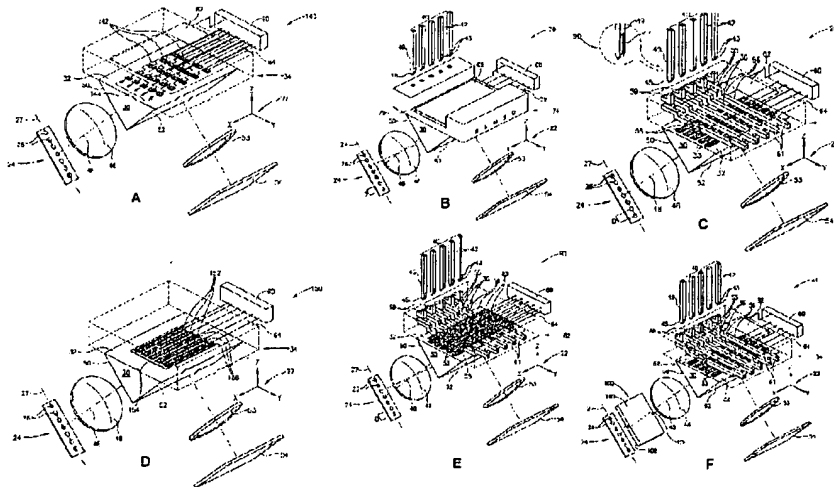
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(54) Title: SURFACE PLASMON RESONANCE SENSOR



(57) Abstract: An SPR sensor comprising: a thin conducting layer comprising at least one conductive element formed on a surface of a transparent substrate; an illumination system controllable to illuminate an interface between the conducting layer and the substrate; a photosensitive surface that generates signals responsive to light from the light source that is reflected from a region of the interface; a flow cell formed with at least one flow channel having a lumen defined by a wall at least a portion of which is formed from an elastic material and a portion of which is formed by a region of the conducting layer; and at least one hollow needle having an exit orifice communicating with the needle's lumen and wherein fluid flow is enabled between the flow channel and the needle's lumen by puncturing the elastic material with the at least one needle so that the exit orifice communicates with the flow channel lumen.

WO 2004/059301 A1

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